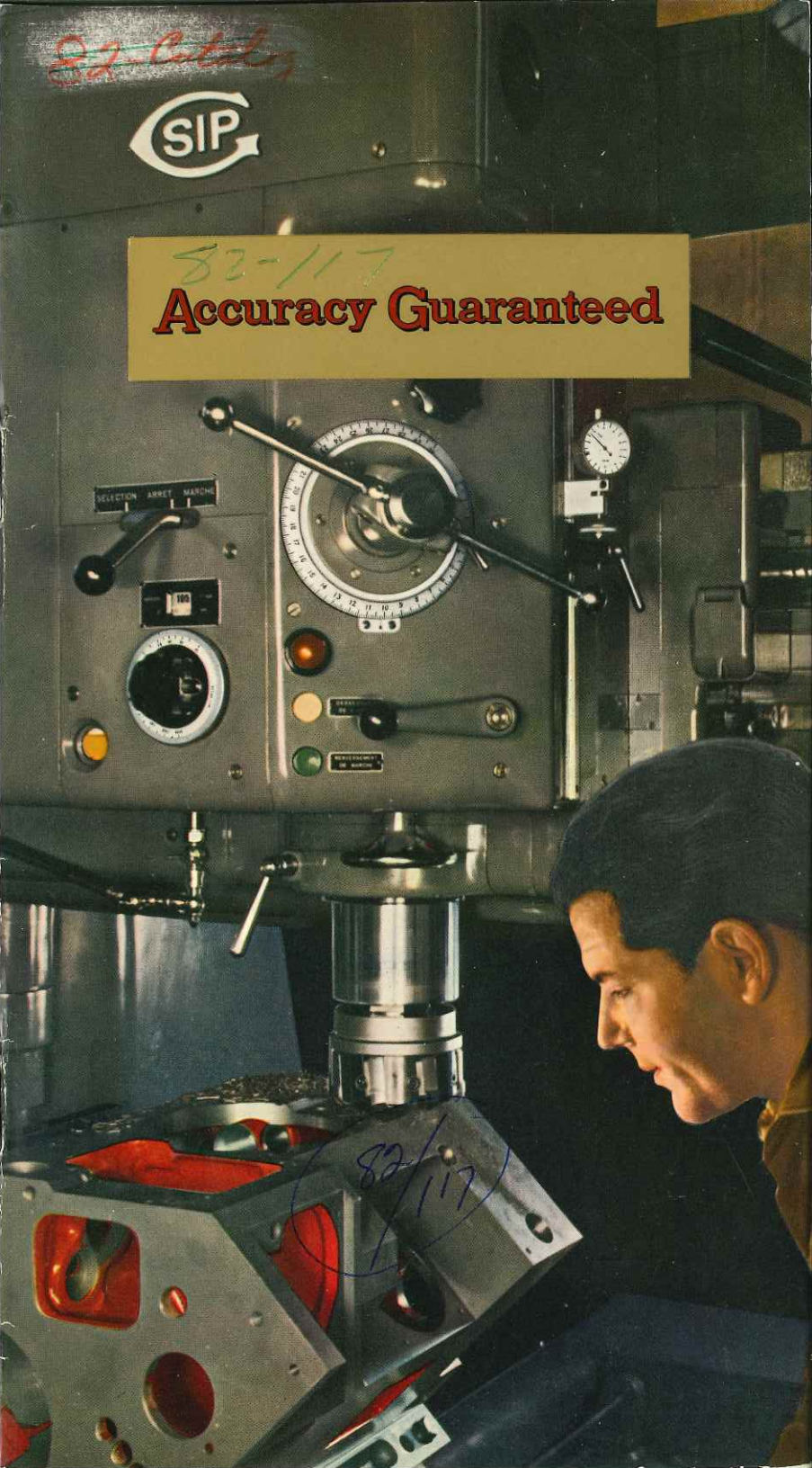

SIP
Accuracy Guaranteed

More and more manufacturers apply

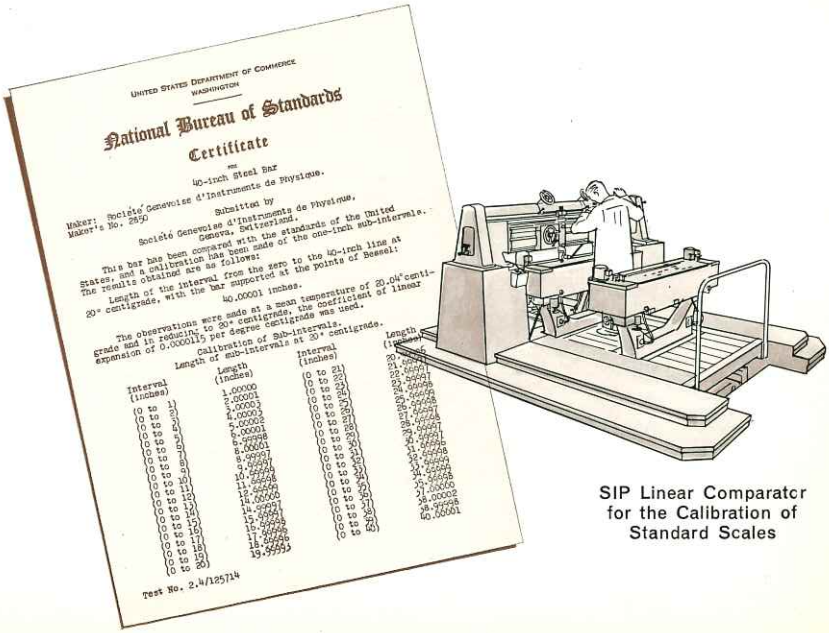
SIP GUARANTEED ACCURACY

to define, establish and maintain high precision, to improve quality-of-output and economy-of-operation.

THE SOCIÉTÉ GENEVOISE D'INSTRUMENTS DE PHYSIQUE

has devoted all its efforts to the construction of high precision machinery and scientific instruments.

Standard scales, linear and circular dividing machines, as well as measuring appliances of SIP manufacture are to be found in most Official Bureaux of Weights and Measures.



UNITED STATES DEPARTMENT OF COMMERCE
WASHINGTON

National Bureau of Standards

Certificate

40-inch Steel Bar

Maker: Société Genevoise d'Instruments de Physique.
Maker's No. 2850

Submitted by
Société Genevoise d'Instruments de Physique,
Geneva, Switzerland.

This bar has been compared with the standards of the United States, and a calibration has been made of the one-inch sub-intervals. The results obtained are as follows:

Length of the interval from the zero to the 40-inch line at 20° centigrade, with the bar supported at the points of Bessel:

40.00001 inches.

The observations were made at a mean temperature of 20.04° centigrade and 15 reducing to 20° centigrade, the coefficient of linear expansion of 0.0000115 per degree centigrade was used.

Calibration of Sub-intervals at 20° centigrade.

Length of sub-intervals

Interval (inches)	Length (inches)
(0 to 1)	1.00000
(0 to 2)	2.00001
(0 to 3)	3.00003
(0 to 4)	4.00003
(0 to 5)	5.00002
(0 to 6)	6.00001
(0 to 7)	7.00000
(0 to 8)	8.99997
(0 to 9)	9.99996
(0 to 10)	10.99994
(0 to 11)	11.99992
(0 to 12)	12.99989
(0 to 13)	13.99988
(0 to 14)	14.99987
(0 to 15)	15.99987
(0 to 16)	16.99988
(0 to 17)	17.99988
(0 to 18)	18.99988
(0 to 19)	19.99989
(0 to 20)	

Interval (inches)	Length (inches)
(0 to 21)	20.99990
(0 to 22)	21.99991
(0 to 23)	22.99991
(0 to 24)	23.99992
(0 to 25)	24.99992
(0 to 26)	25.99992
(0 to 27)	26.99993
(0 to 28)	27.99994
(0 to 29)	28.99995
(0 to 30)	29.99997
(0 to 31)	30.99998
(0 to 32)	31.99998
(0 to 33)	32.99999
(0 to 34)	33.99999
(0 to 35)	34.99999
(0 to 36)	35.99999
(0 to 37)	36.99999
(0 to 38)	37.99999
(0 to 39)	38.99999
(0 to 40)	40.00001

Test No. 2.4/125714

SIP Linear Comparator for the Calibration of Standard Scales

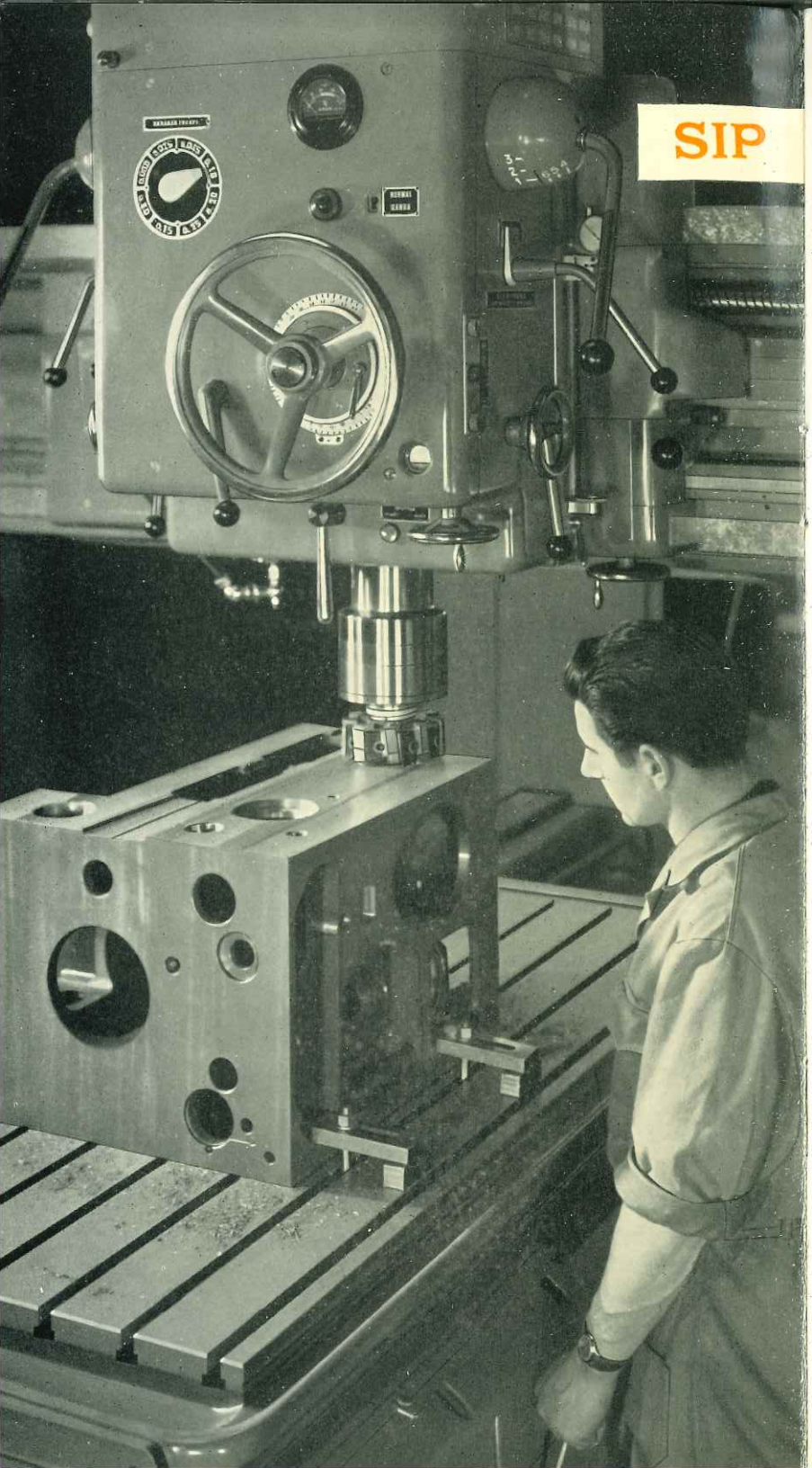
The Standard Scale

World Basis of Length Measurements

One century of experience in the field of applied metrology combined with a unique technique of manufacture and assembly are the secret of SIP's renown.

The heart of almost every SIP product is the STANDARD SCALE the graduations of which are viewed by means of an optical system. The scale is manufactured in the same way and with the same care as those delivered to the various Bureaux of Weights and Measures.

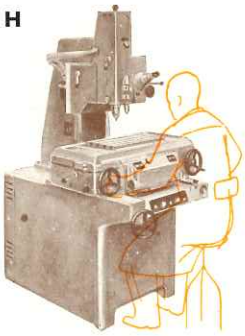
Therefore, to equip a plant with a SIP Machine is in reality to furnish a unique and permanent metrological basis for all metal-working processes.


SIP

Jig Boring Machines

are made in **seven sizes** covering all the requirements of the metal-working industry, from watchmaking to locomotive and aircraft manufacture. Incorporating fully protected built-in measuring standards, they give unparalleled precision, high efficiency and permanent accuracy.

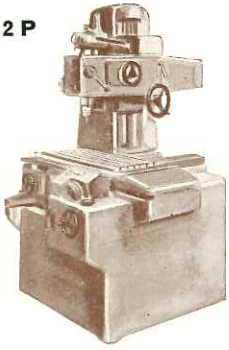
No. 1 H



Guaranteed accuracy: 0.00008"

Working range . . . . . 8″×8″
Boring capacity . . . . . dia. 1″

No. 2 P

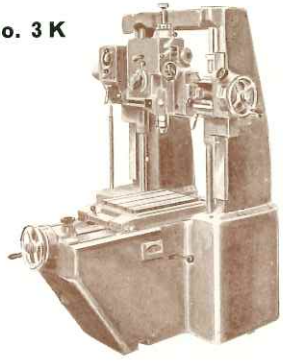


Guaranteed accuracy: 0.0001"

Working range . . . . . 16″×10″
Boring capacity . . . . . dia. 1 9/16″

with Built-in Standard Scales and Setting Screens

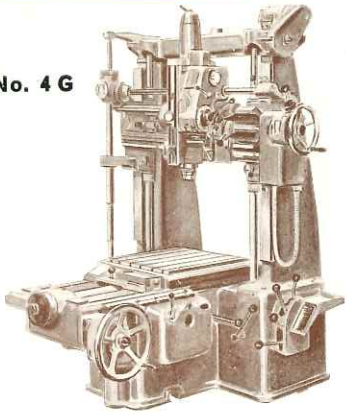
No. 3 K



Guaranteed accuracy: 0.00015"

Working range . . . . . 18″×14″
Boring capacity . . . . . dia. 4″

No. 4 G



Guaranteed accuracy: 0.0002"

Working range . . . . . 24″×20″
Boring capacity . . . . . dia. 9″

with Precision Lead Screws and Built-in Automatic Correction Devices

Optical Jig Boring and Milling Machines

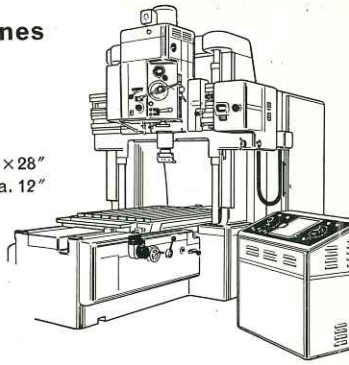
Built-in Standard Scales and Setting Screens

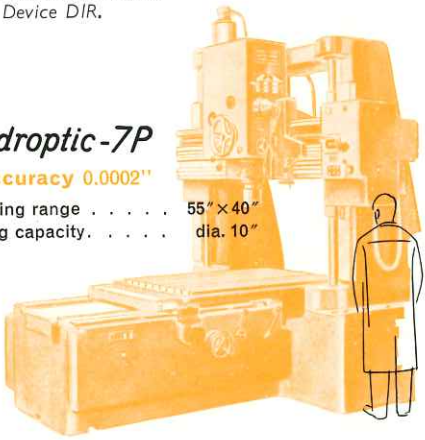
Hydroptic-6A

Guaranteed accuracy 0.00015"

Working range . . . . . 40″×28″
Boring capacity. . . . . dia. 12″

Can be supplied to order with Automatic Repeating Device DIR.

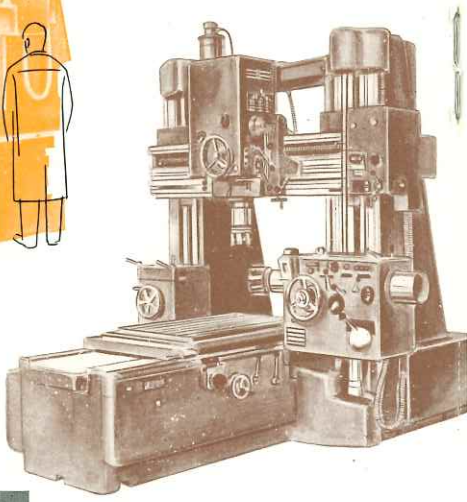




Hydroptic-7P

nteed accuracy 0.0002"

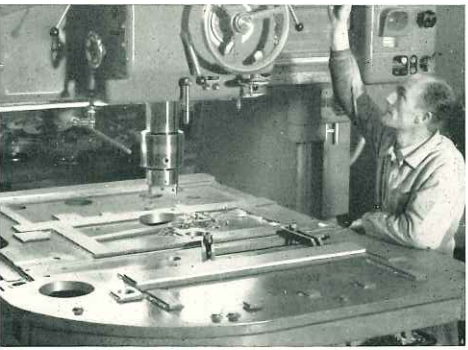
Working range . . . . . 55″×40″
Boring capacity. . . . . dia. 10″



Hydroptic-8P

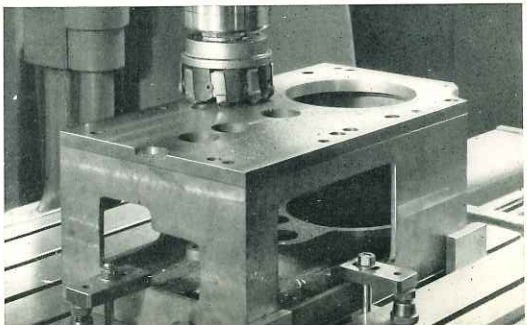
anteed accuracy 0.0002"

Working range . . 55″×40″×33¼″
Boring capacity . . . . . 10″



Production without the use of costly jigs and fixtures ensures flexibility of the manufacturing schedule, accurate fits and consistent interchangeability.

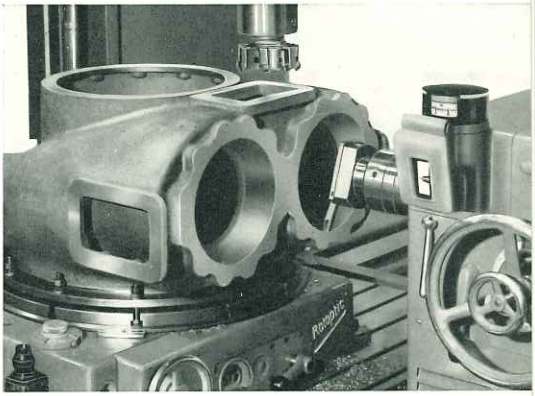
There is no job the SIP Jig Borer will not perform with amazing speed and precision.

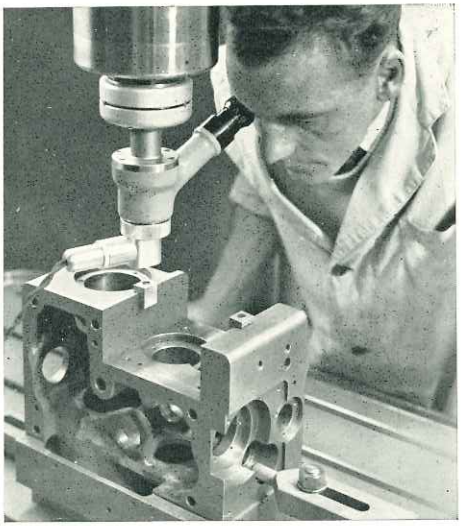


Loads of 5000 pounds and over are handled on the planer-type SIP Jig Borers.

Examples of Work

For development work the SIP Jig Borers guarantee rapid production and reliable operation. Large circular tables simplify intricate work.



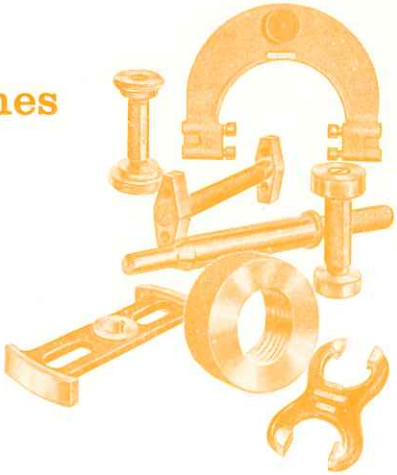


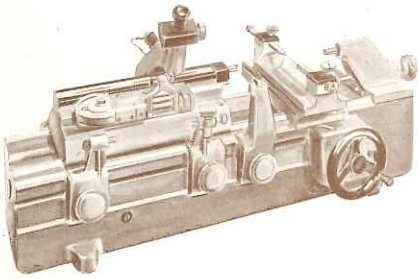
Because of its built-in measuring standards of extreme precision, the SIP Jig Borer constitutes a most reliable measuring machine of large capacity to which all shop measurements can be related.

SIP

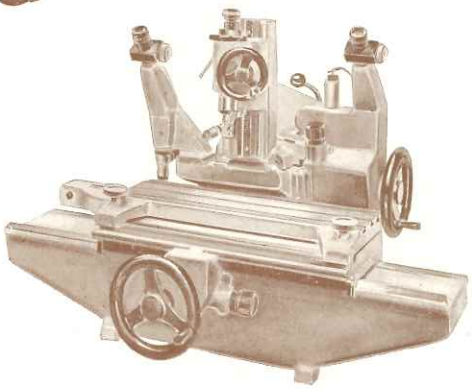
Measuring Machines

incorporate **steel standard scales** viewed by micrometer microscopes reading direct to 0.00005 in.



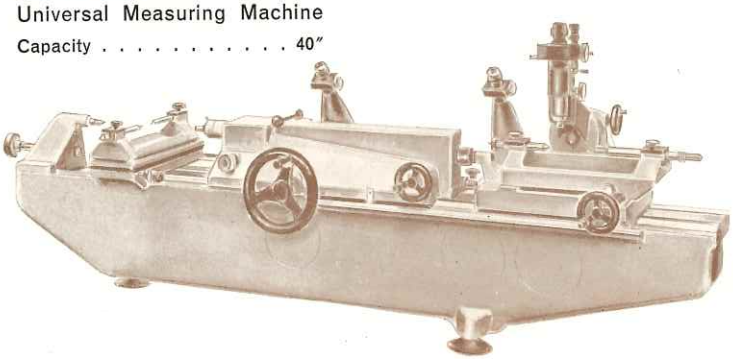


MUL-300 Universal
Shop Gauge Measuring Machine
Capacity . . . . . 12″

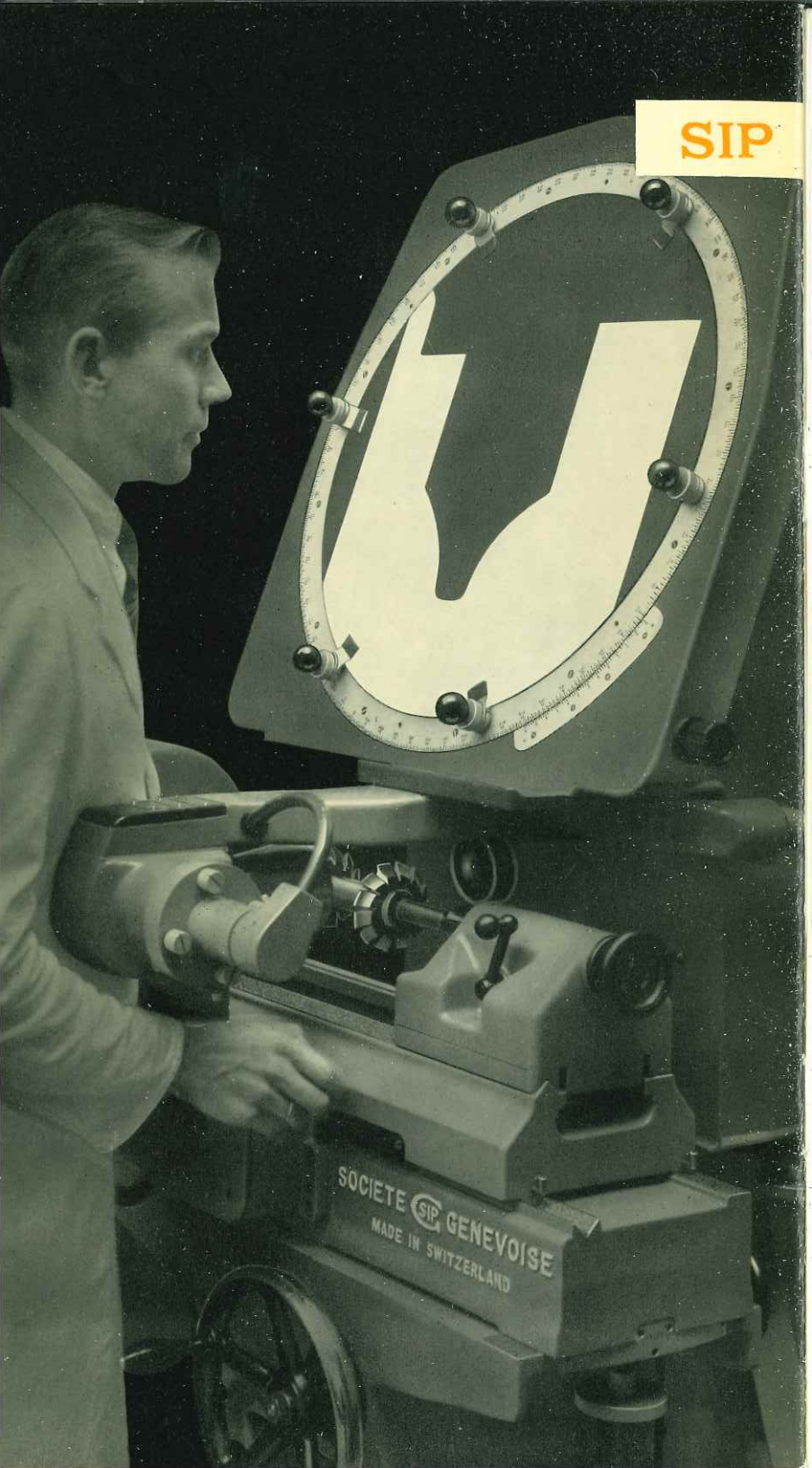


MU-214 B Three-coordinate
Universal Measuring Machine
Capacity . . . . . 16″ × 4″ × 6″

MUL-1000
Universal Measuring Machine
Capacity . . . . . 40″

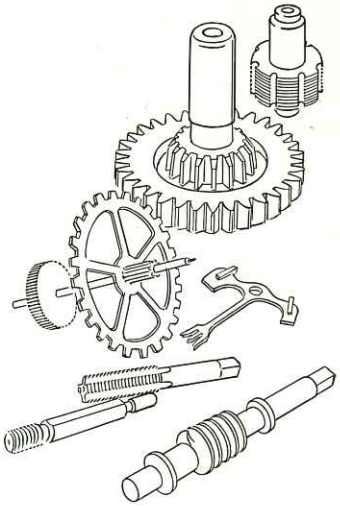


Larger Measuring Machines
up to a capacity of 160 inches are available

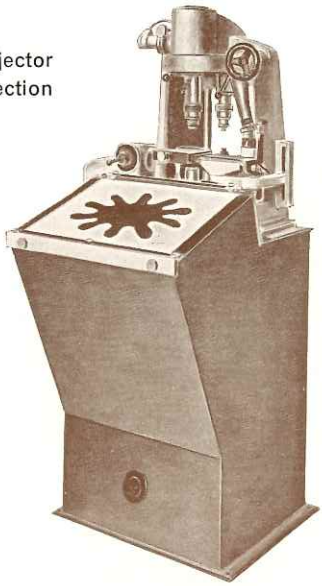

SIP
SOCIETE SIP GENEVOISE
MADE IN SWITZERLAND

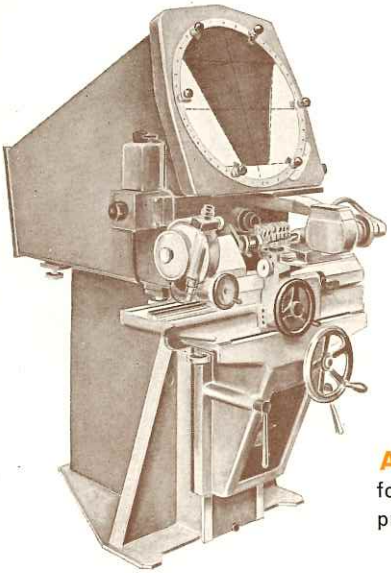
Profile Projectors

have been ceaselessly improved for more than twenty-five years.
They are the ideal medium for the rapid and accurate contour and surface inspection of small parts and intricate components which cannot be gauged mechanically.



AP-10 Universal Profile Projector for contour and surface inspection





AP-6A Profile Projector for the inspection of hobs, profile cutters, screws, etc.

Small Measuring Equipment on Request

The SIP World-wide Organization

SOCIÉTÉ GENEVOISE
D'INSTRUMENTS DE PHYSIQUE

GENEVA • SWITZERLAND

REPRESENTATIVE FOR U.S. AND CANADA:

AMERICAN SIP CORPORATION

100 East 42nd Street NEW YORK 17, N.Y.

Telephone: OXford 7-0865